

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/011461

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 C07C2/40 C07C5/05

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, CHEM ABS Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>P ROFFIA ET AL: "Catalysis by palladium salts IV selective hydrogenation with formic acid in the palladium catalysed dimerisation of 1,3-butadiene; synthesis of 1,7-octadiene"</p> <p>JOURNAL OF ORGANOMETALLIC CHEMISTRY., vol. 55, 1973, pages 405-407, XP002279516</p> <p>ELSEVIER-SEQUOIA S.A. LAUSANNE., CH</p> <p>ISSN: 0022-328X</p> <p>the whole document</p> <p style="text-align: center;">----- -/--</p>	1-15

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
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- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

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- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

1 February 2005

Date of mailing of the international search report

10/02/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	M F SLOAN ET AL: "Soluble catalysts for the hydrogenation of olefins" JOURNAL OF THE AMERICAN CHEMICAL SOCIETY., vol. 85, no. 24, 1963, pages 4014-4018, XP002279518 AMERICAN CHEMICAL SOCIETY, WASHINGTON, DC., US ISSN: 0002-7863 example 2; table 1	1,16-21
A	WO 03/031378 A (MASCHMEYER DIETRICH ;OXENO OLEFINCHEMIE GMBH (DE); SANTIAGO FERNAN) 17 April 2003 (2003-04-17) cited in the application page 3, line 19 - line 24 page 6, line 17 - line 21 examples 1-4	1-21
A	US 4 229 605 A (NOZAKI KENZIE) 21 October 1980 (1980-10-21) column 2, line 44 - line 68 table 1	1-15
A	EP 0 704 417 A (KURARAY CO) 3 April 1996 (1996-04-03) cited in the application example 1	1-15
A	EP 0 008 139 A (SHELL INT RESEARCH) 20 February 1980 (1980-02-20) table II claim 1	1-15
A	US 4 243 829 A (HANES RONALD ET AL) 6 January 1981 (1981-01-06) examples 1,5	1-15

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/011461

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 03031378	A	17-04-2003	DE	10149347 A1	10-04-2003
			WO	03031378 A1	17-04-2003
			EP	1446374 A1	18-08-2004
US 4229605	A	21-10-1980	DE	2965830 D1	11-08-1983
			EP	0012472 A1	25-06-1980
			JP	1052371 B	08-11-1989
			JP	1583193 C	22-10-1990
			JP	55081819 A	20-06-1980
EP 0704417	A	03-04-1996	CA	2159135 A1	29-03-1996
			DE	69507414 D1	04-03-1999
			DE	69507414 T2	02-09-1999
			EP	0704417 A2	03-04-1996
			JP	9124518 A	13-05-1997
			US	5763718 A	09-06-1998
EP 0008139	A	20-02-1980	DE	2962197 D1	25-03-1982
			EP	0008139 A1	20-02-1980
			JP	55019275 A	09-02-1980
US 4243829	A	06-01-1981	US	4377719 A	22-03-1983